

## Building digital platform observatories

*Tuesday 16 June 2026, 9:00am – 5:00pm*

*UQ Brisbane City Campus, 308 Queen Street, Brisbane City, QLD 4000*

The need for digital observatories emerges from the limits of existing approaches to digital platform research and accountability which tend to emphasise transparency over the creation of “conditions for the practice of observing” (Rieder & Hoffman, 2020, p. 3). If observability is not only about converting the invisible into the visible, then an observatory is more than research tools or methods. In astrophysics, observatories are known to play a crucial role in advancing research in that they “organize and mobilize a range of multidisciplinary skills for achieving a coherent and sustainable capability” (Illingworth, 2017, p. 1). The potential of the observatory is no different for humanities and social science researchers. In fact, this potential can be greatly exceeded by establishing the observatory as a public institution that enables everyday practices of observability among the public; frameworks of governance and regulation; and the production of trustworthy observations by researchers.

This workshop brings together researchers who have been developing major research infrastructure initiatives to make digital platforms and their automated models more open to public observation and accountability.

This event is hosted by The Centre for Digital Cultures and Societies (DCS) in partnership with the Australian Internet Observatory (AIO). The AIO is a co-investment partnership with the Australian Research Data Commons (ARDC) through the HASS and Indigenous Research Data Commons (DOI: 10.3565/hjrp-b141). The ARDC is enabled by the Australian Government’s National Collaborative Research Infrastructure Strategy (NCRIS).



Australian Research Data Commons Australian Government



## Program

Time	Session
8:30am	Registrations and arrival coffee tea
9:00am	Welcome
9:30am	<p><b>Session 1: Why build digital observatories?</b></p> <p><i>Liz McFall, Edinburgh.</i> What is a Data Civics Observatory good for?</p> <p><i>James Smithies, ANU.</i> Enabling the Design of National Infrastructures for Humanities &amp; Social Science Research</p>
10:45am	Morning tea
11:00am	<p><i>Nic Carah, UQ and Julian Thomas, RMIT.</i> Building the Australian Internet Observatory</p> <p><i>Daniel Angus, QUT.</i> Improvising Observability: Tools and Tactics for Hard-to-Access Platform Data</p> <p><i>Kellie Vella, UQ.</i> Scaling up HASS digital platform research: Challenges and opportunities</p>
12:30pm	<i>Lunch</i>
1:30pm	<p><b>Session 2: Experiences building digital observatories</b></p> <p><i>Lauren Hayden and Michael Esteban, UQ.</i> Intimate but Inexact: Participatory Data Donation in Practice</p> <p><i>Laura Vodden, QUT.</i> The shifting frontier of data access: From APIs to clean rooms, and the impact on platform observability</p> <p><i>Patrik Wikstrom and Michelle Gay Nidoy, QUT.</i> Too messy to use? Learnings from building a tool to unlock participant-donated TikTok data</p> <p><i>Christine Parker, Melbourne and Giselle Newton, UQ.</i> The Australian Ad Observatory as Observability Practice</p>
3:30pm	Afternoon tea
3:45pm	<p><b>Session 3: Building an international array of observatories</b></p> <p>Facilitated discussion on building observatories as institutions and as an international array led by <i>Nic Carah and Dan Angus.</i></p>
4:45pm	Event concludes

## Full abstracts

### What is a Data Civics Observatory good for?

**Liz McFall**

This talk focuses on the role of the Data Civics Observatory (DCO) within the larger context of the Edinburgh Futures Institute (EFI). As one of several global futures institutes that have sprung up over the last decade EFI might be classed as a quintuple helix model of innovation, combining the principles of interdisciplinarity, cross-sectoral collaboration and co-production to tackle accelerating global polycrises. The DCO on the other hand draws its inspiration from Patrick Geddes to experiment with observational techniques and visual media designed to explore often small-scale and highly specific questions of place-based civic representation. This work is often conducted on a small-scale but, as with Geddes' model, the Observatory is designed to zoom in and out, using platforms, techniques and tools that offer multiple, embodied perspectives simultaneously. Internet observatories can draw on a range of digital tools to facilitate this but the challenge of making useful civic outcomes may even be harder in the contemporary university. The talk will explore these issues using examples including the newly UKRI funded Digital Gambling Observatory and the EFI seed-funded projects CovidArcadia and Granton CivicScope.

### Enabling the Design of National Infrastructures for Humanities & Social Science Research

**James Smithies**

High profile failures in the development of large-scale national research infrastructure (RI) for humanities and social science (HASS) research, symbolised most evocatively in the Project Bamboo initiative in the United States during the early millennium, and a broader lack of understanding across the HASS community about the nature of complex system design, hampers the HASS research community. Impressive and well-funded initiatives in the United Kingdom and Europe suggest paths forward but come with their own issues that mid-size economies like Australia can avoid. This talk recommends that the Australian HASS community continues developing new infrastructures but engages in concurrent activity to build shared technical understanding grounded in agreed architectures, software patterns, and associated enabling technologies. Rather than being a narrowly instrumental process, research software engineering (RSE) and Science and Technology Studies (STS) suggests this is best conceived as a tractable but non-trivial exercise in design, engineering, and socio-technical analysis. By establishing such a shared understanding, one that supports innovation and change as well as continuity and sustainability, individual researchers and their institutions will be better placed to realise large-scale enabling visions for the HASS community and deliver better return on investment for the public funding used to build and maintain them.

### Building the Australian Internet Observatory

**Nicholas Carah and Julian Thomas**

The Australian Internet Observatory (AIO) was founded in 2024 in partnership with the Australian Research Data Commons. The AIO is building digital infrastructure that enables Australians to donate data to researchers about their experiences of digital platforms and services. Donated data enables researchers to track and conceptualise how automated models shape the feeds of content, AI-generated interactions, and decisions that now shape cultural life. In this talk, we reflect on the development of the AIO within Australian and international digital research structure. We particularly consider the place of the AIO in larger efforts toward platform observability. We consider Rieder and Hoffman (2020) proposed 'observability' as a 'more pragmatic way of thinking about the means and strategies to hold platforms accountable' in relation to the AIO. We consider in particular the platform observatory as a new kind of public institution that enables ordinary Australians, civil society, government and researchers to work together to jointly observe, foster and protect digital cultures that benefit us all.

## Improvising Observability: Tools and Tactics for Hard-to-Access Platform Data

**Daniel Angus**

Internet studies researchers are the original improvisers, long adapting tools and tactics in response to unstable platforms, shifting interfaces, and evolving forms of use. This talk argues that improvisation should not be understood as methodological weakness or compromise, but as a core strength of internet research: a capacity to work with and around the contingencies and affordances of platforms themselves. Drawing on examples from research into advertising systems, search engines, recommendation algorithms, and mobile environments, the talk explores how shared research infrastructure can embrace improvisation as a way of scaling both ambition and quality, enabling workflows, tactics, and observability practices to circulate, evolve, and be collectively refined over time.

## Scaling up HASS digital platform research: Challenges and opportunities

**Kellie Vella**

HASS is a broad umbrella of disciplines linked by a focus on often messy human experiences. With every method available to them, how might HASS researchers approach digital platform data and what stands in their way? Interviews with 22 researchers from media and communications, video game studies, sociology, psychology, and more, suggest that digital observatories can act to standardize methods and lead best practice in the study of digital lives. Critically, observatories can scale up HASS research by supporting qualitative methods and addressing the ethical and regulatory challenges of research with sensitive data.

## Intimate but inexact: Lessons from a participatory data donation study

**Lauren Hayden & Michael Esteban**

An emerging approach to studying opaque and algorithmically-personalised digital platforms is participant donation of data download packages (DDPs), which are personal data archives that users can export from many digital platforms (Carrière et al., 2025). However, DDPs can contain highly personal information accumulated over many years, raising important questions about privacy, agency, interpretation, and consent. The Australian Internet Observatory is developing software which allows researchers to conduct data donation studies, while preserving privacy and agency of participants. To inform this design process, we conducted a pilot study to explore DDP donation with frequent users of digital platforms. We recruited four undergraduate research assistants (RAs) to iteratively provide feedback on software prototypes, before each RA invited two peers to download and reflect on their own DDPs in a semi-structured interview. In this talk, we illustrate how participants negotiated accessing, viewing, and interpreting their DDPs from Instagram and/or YouTube. Our study contributes to methodological development of DDP donation by highlighting complexities in the ways that participants found their DDPs to be highly intimate yet frustratingly inexact with inaccurate, partial or missing data. We will demonstrate how these findings informed (and continue to shape) the technical design of the AIO platform and underscore the importance of participatory approaches to digital observability.

## The shifting frontier of data access: From APIs to clean rooms, and the impact on platform observability

**Laura Vodden and Axel Bruns**

This presentation examines the “clean room” data access model, as exemplified by Meta’s Meta Content Library (MCL) and ProQuest’s TDM Studio, with particular attention to the technical and bureaucratic barriers embedded in these environments and their broader implications for platform observability. In the MCL, access is governed by rigorous institutional vetting, whereas in TDM Studio it is shaped primarily by financial cost; together, these cases reflect a broader shift towards increasingly restrictive forms of platform data access. A response to concerns about privacy and/or copyright infringement, the clean room data access model narrows

the scope of research by constraining the volume of data that can be analysed through storage limits and mandatory data deletion policies, while restrictions on data export, typically limited to aggregated outputs, tend to preference high-level over granular analysis. The model also impedes scholarly collaboration, analytical reproducibility, and the circulation of methodological innovation, as access to the data is governed by strict terms of service, and sharing workflows and code is cumbersome and not conducive to industry-standard best practices. Additionally, this siloing of platform data hinders any cross-platform analysis. Importantly, the clean room model tends to privilege quantitative over qualitative data analysis, given the absence of integrated qualitative coding tools and even basic spreadsheet functionality, despite the capacity of qualitative methods to generate deeper, more nuanced, and contextually rich insights. Taken together, the clean room model not only governs access to data but also shapes the kinds of research that can be undertaken and the directions it is able to take.

## Too messy to use? Learnings from building a tool to unlock participant-donated TikTok data

**Patrik Wikstrom and Michelle Gay Nidoy**

HASS researchers frequently encounter this challenge. Not because participant data lacks value, but because the path from a folder of 'raw' participant data donations to a viable research finding is complex and overwhelming. Between donation and insight lies a mountain of tedious work such as recovering missing metadata and hand-coding content across endless spreadsheets. This labour often stalls projects even before meaningful analysis can begin.

In this talk, we present insights gained from the development and application of a tool designed to address this bottleneck. The tool ingests participant-donated TikTok data and processes it through an automated pipeline that combines metadata enrichment with AI-assisted annotation. Supporting both rigorous time-series analysis and qualitative video analysis, it presents results through an interactive dashboard designed for HASS researchers rather than engineers.

Drawing on the experience of developing this tool, we walk through a real case from initial upload to the emergence of research-relevant patterns, demonstrating how researchers can reduce weeks of manual processing to a matter of days. We reflect on the kinds of insights that donated data can realistically support and conclude with an invitation for HASS researchers to explore how the tool might be applied to their own projects.

## The Australian Ad Observatory as Observability Practice

**Christine Parker and Giselle Newton**

Digital advertising presents a distinctive challenge for platform observability. While ad libraries and public pages might suggest digital advertising is already accessible to researchers, the way individuals and groups see and experience ad flows is shaped by commercial and algorithmic determinants in hidden ways that resist scrutiny. In this presentation we will discuss the ADM+S Australian Ad Observatory as a practice of observability in partnership with the Australian Internet Observatory. Drawing on the Ad Observatory's multi-method approach — combining large-scale data collection of digital advertising with in-depth co-analysis interviews with affected communities, and close examination of specific advertising cases — we demonstrate what a 'deeper' and more situated model of observability looks like in practice. Our presentation will surface some of the challenges of working with an infrastructure that must be constantly dynamic and adaptable to changing platform affordances and systems. We will reflect on the forms of intimacy or closeness that can develop when ads which are typically "dark" become visible and examinable by the researcher, who looks in making inferences about the participant's biography, consumption, desires and preferences. We will also discuss how we work with the AIO, with our participants, and with each other and partners to address our research questions. We also reflect on the implications of our practice for digital platform governance and regulation and digital observatories more broadly.